

IN THE SPECIFICATION

Please **REPLACE** the paragraph beginning at page 1, line 12, starting with "Recent progress" with the following paragraph:

A1
--Recent progress of genetic engineering has brought rapid progress of a technique for determining a gene arrangement such as expressed by a DNA sequence and/or an amino acid sequence. Further, the genome project is being conducted worldwide so as to clarify all gene arrangements of specific organisms (i.e., to sequence or identify gene information), for various species including human beings. As such, databases of gene arrangement information have increased explosively, so as to effectively utilize those previously clarified gene arrangement information (sequenced gene information or genetic sequences).--

IN THE CLAIMS

Please **CANCEL** claim 1 without prejudice or disclaimer.

Please **REPLACE** claims 2-6 and 8-9 as follows.

- A2
2. (ONCE AMENDED) A genetic motif extracting and processing apparatus comprising:
- gene arrangement information storing means for storing gene arrangement information;
 - gene arrangement information inputting means for inputting at least one piece of gene arrangement information;
 - motif extraction range designating means for an operator interactively designating on a display screen a motif extraction range in the input gene arrangement information and extracting a genetic motif within the designated extraction range from the input gene arrangement information;
 - gene arrangement information retrieving means for retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from said gene arrangement information storing means; and
 - gene arrangement information adding means for adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.

3. (ONCE AMENDED) A genetic motif extracting and processing apparatus according to claim 2, further comprising gene arrangement information editing means for editing the gene arrangement information.